

Remarks

The undersigned would like to thank Examiner Koslow and Examiner Jerry Lorengo for the courtesies extended at a personal interview on January 24, 2006. In accordance with the subjects discussed at the interview, the present amendment cancels all previously pending claims in favor of new claim 21. In the interest of simplifying prosecution, new claim 21 is the sole remaining claim.

Basis for new claim 21 is believed to be found specifically at page 3, lines 11-25 of the translated specification. In addition, basis is found at page 7, lines 17-19 and in particular, the drawings of Figs. 4C and 4D.

Objections to Drawings and Specification

Corrected drawings and an amended specification are submitted herewith. They are believed to address the concerns expressed by the Examiner and are in harmony with the amended specification.

Supplemental Information Disclosure Statement

As was discussed at length in the interview, the European Counterpart patents of the subject application were the objects of validity challenges by an affiliate of current Assignee of the present application. The claim scope at issue was generally of the scope of previously pending claims, now cancelled by this Amendment.

The specific embodiment featured by the present pending claim was not particularly claimed in the European Counterpart patents. Arguments were made by the Assignee's Affiliate Company (Core Products SAS) that the peaks appeared to show a spacer that would contact a wall and preclude e-coat coverage in the contacted regions.

All European Counterparts now stand revoked (see translated Decision of European Patent Office Tab 1). In addition to the above, Core Products SAS also filed actions to invalidate the corresponding patents in the United Kingdom (see Tab 2), Spain, France and Italy.

Prior to revocation of the patents by the EPO, the Federal Patent Court in Germany revoked one of the priority German Patents (see translation of Tab 3). It is also noted that the patent of addition to which the present application claims priority

was also revoked by the German Patent and Trademark Office in a decision on or about 19 May 2003 (see translation of Tab 4).

The dispute settled in Summer 2005, with the predecessor Applicant's assignee agreeing, among other things, to assign the present application to L&L Products, Inc.

A listing of the cited items is on forms PTO/SB/08A and PTO/SB/08B. Applicants respectfully solicit the Examiner's consideration of the cited references and entry thereof into the record of this application.

If any fees are due with the filing of this paper please charge them to deposit account 50-1097.

Petition For Extension of Time

Applicants respectfully request and petition an appropriate extension of time to respond to the outstanding Office Action, of at least one (1) month. Enclosed is a check in the amount of \$120.00. For any deficiencies, please charge Deposit Account No. 50-1097 for any fee which may be due is hereby given.

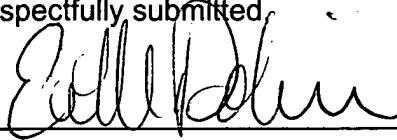
Conclusions

The undersigned respectfully requests the office to Examiner the claim submitted herewith for patentability in view of the prior art. Should patentability be determined, a Notice of Allowance to that effect is respectfully requested. Should the Examiner have any question or wish to further discuss this application, Applicant requests that the Examiner contact the undersigned at (248) 292-2920.

If for some reason Applicant has not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent the abandonment of this application, please consider this as a request for an extension for the required time period and/or authorization to charge our Deposit Account No. 50-1097 for any fee which may be due.

Dated: March 7, 2006

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Eric M. Dobrusin", written over a horizontal line.

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Application no./Patent no.	Reference	Date
99 916 789.3 - 2425/1064188/01	FAE R5044.00013	27.05.2005

Patent proprietor
MöllerTech GmbH

Decision on the revocation of the European Patent (Article 102(1), (3) EPC)

The Opposition Division at the oral proceedings on 08.02.2005 has decided:

European Patent: no. EP-B-1064188 is revoked.

The grounds for the decision are attached.

Legal advice

An appeal may be lodged against this decision. Attention is drawn to the attached text of Articles 106 - 108 EPC.

Opposition division:

Chairman: Buergo, J
2nd Examiner: Wochinz, R
1st Examiner: Peters, U

Mummery, T

Official in charge

Tel: +49 89 2399-8212

Annex(es): 13 pages of grounds for the decision (Form 2916)

Text of Art. 106 - 108 EPC (Form 2019)

Handed in to the post office on 23.05.05

Registered letter with confirmation of receipt

I. Summary of the facts and submissions

I.1 The disputed European Patent

The disputed European Patent EP-B-1 064 188 is based on European Patent application no. 99916789.3.

Designation:

Hollow profile with inner reinforcement and method for the production of this hollow profile

Date of filing: 15.03.1999

Claimed priority: 20.03.1998 DE 19812288
07.12.1998 DE 19856255

Publication of the mention of the grant of the patent:
02.01.2002 Patent Bulletin 2002/01

Patent proprietor: Möller Plast GmbH
33649 Bielefeld (DE)

I.2 Oppositions and opposition proceedings

Oppositions have been submitted by:

I.2.1 Opponent I

Core Products SAS
6, rue Ampere
67120 Duttlenheim (FR)

The notice of opposition from the opponent Core Products SAS dated 27.09.2002 was received on 02.10.2002 by the European Patent Office and was communicated to the patent proprietor and the other opponents according to rule 57 of the EPC Implementing Regulations.

I.2.2 Opponent II

Henkel KG
Henkelstrasse 67
40589 Düsseldorf

The notice of opposition from the opponent dated 02.10.2002 was received on 07.10.2002 by the European Patent Office and was communicated to the patent proprietor and the other opponents according to rule 57 of the Implementing Regulations.

I.2.3 Opponent III

Adam OPEL AG
D-65423 Rüsselsheim

After the opposition period had expired, opponent III in its letter dated 13.06.2003 applied to intervene in the present opposition proceedings in accordance with Article 105 EPC. The notice of opposition on account of alleged infringement of the disputed patent dated 09.05.2003 was submitted later in its letter of 01.07.2003. The period of three months specified in Art. 105 EPC was therefore complied with by opponent III.

The notices of opposition were communicated to the patent proprietor and the other opponents according to rule 57 of the Implementing Regulations.

I.2.4 Requests of the parties in the written proceedings

Opponents I to III request that the granted European Patent is revoked in its full scope.

Furthermore, oral proceedings are requested by the opponents.

The oppositions of the opponents are supported by the fact that

(a) the subject-matter and the method are not new and in addition do not involve an inventive step (Art. 100 (a) and Art. 52 to 56 EPC);

(b) the European Patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Art. 100 (b) and Art. 83 EPC) and

(c) the method and/or the subject-matter of the European Patent extend beyond the content of the application as originally filed (Art. 100(c) and 123(2) EPC).

The patent proprietor requests that

1. the notice of opposition is rejected and the patent is maintained in its unaltered state,
2. alternatively the patent is maintained in an amended version and
3. alternatively a date for oral proceedings is set, should the Opposition Division not maintain the disputed patent on the basis of the written proceedings.

1.2.5 Oral proceedings and amended requests

During the oral proceedings on 08.02.2005, the course of which is clear from the minutes recorded at the oral proceedings, the opponents adhered to their requests to revoke the disputed patent.

The patent proprietor however altered its requests and requested in the main request for the patent to be maintained in its amended version.

In the new Claim 1 in accordance with the main request compared to the granted version of Claim 1, the feature "or is formed by a hollow profile" is deleted without substitution.

Claim 1 in accordance with the main request there reads as follows:

1. Method for the production of a hollow profile with inner reinforcement, in particular for use with automobile bodies,
 - in which a rigid core material (1) is coated with activatable material (2) and an outer panel (4) is arranged so as to form a defined cavity (3),
 - whereby the cavity is completely filled by the foaming action of the activatable material (2) and
 - the rigid core material (1) consists of a foamed or non-foamed metallic material and/or a synthetic material reinforced with metal fibres, carbon fibres or glass fibres and
 - the profile is conveyed before the foaming action of the activatable material (2) to an anti-corrosion dip-tank and the corrosion protection medium reaches all areas of the inner profile and
 - afterwards the hollow profile is conveyed to a drying oven and
 - a reaction of the activatable material is triggered in the drying oven and as a result the pre-defined hollow space between the activatable material and the outer panel is filled with foam.

Basis for the alternative request of the patent proprietor was the following Claim 1 as amended during the oral proceedings:

1. Method for the production of a hollow profile with inner reinforcement, in particular for use with automobile bodies,
 - in which a rigid core material (1) is coated with activatable material (2) and an outer panel (4) is arranged so as to form a defined cavity (3),
 - whereby **the size of the hollow space between the activatable material (2) and the outer panel is determined through spacers (5) arranged on the activatable material (2) and on the inside of the outer panel (4)** and the cavity is completely filled by the foaming action of the activatable material (2) and

- the rigid core material (1) consists of a foamed or non-foamed metallic material and/or a synthetic material reinforced with metal fibres, carbon fibres or glass fibres and
- the profile is conveyed before the foaming action of the activatable material (2) to an anti-corrosion dip-tank and the corrosion protection medium reaches all areas of the inner profile and
- afterwards the hollow profile is conveyed to a drying oven and
- a reaction of the activatable material **causing a foaming action** is triggered in the drying oven and as a result the pre-defined hollow space between the activatable material and the outer panel is filled with foam **and whereby the temperature for the coating of the rigid core material (1) provided with the activatable material (2) is kept lower than the stoving temperature for the corrosion film in the drying oven.**

The underlined features printed in bold are different to Claim 1 in accordance with the main request.

I.3 Prior art

For determining the prior art the priority dates of 20.03.1998 (DE 19812288) and 07.12.1998 (DE 19856255) according to Art. 54 (2) in conjunction with Art. 89 EPC are relevant in the present case.

D1: WO-A-93/05103	(published on 18.03.1993)
D2: FR-A-2 749,263	(published on 05. 12.1997)
D3: JP-A-7-117728	(published on 09.05.1995)
D4: WO-A-99/39882	(published on 12.08.1999, priority 04.02.1998)
D5: WO-A-95/32110	(published on 30.11.1995)
D6: JP-U-58-87668	(published on 14.06.1983)
D7: US-A-5 160,465	(published on 03.11.1992)
D8: JP-A-7-31569	(published on 13.06.1995)
D9: Patent Abstract JP-A-02-276836	(published on 13.11.1990)
D10: US-A-5 194 199 & D19	(published on 16.03.1993)
D11: DE-A-4227393	(published on 04.03.1993)

D12: DE-A-196 35734 (published on 03.04.1997)
 D13: WO-A-96/37400 (published on 28.11.1996)
 D14: WO-A-98/21060 (published on 22.05. 1998)
 D15: WO-A-97/43501 (published on 20.11.1997)
 D16: EP-A-0 775721 (published on 25.07.1996)
 D17: SAE paper J447 (published 1995)
 D18: Cathodic Electrocoat (published on 04.1980)
 D19: DE-A-42 034 60 & D10 (published on 27.08.1992)
 D20: EP-A-0 383498 (published on 09.02.1990)
 D21: Novacore Presentation Chrysler Jeep 1995 (published on 24.08.1995)
 D22: Affidavit Thomas Kleino
 D23: R Lambourne Paint and Surface coatings (no date of publication indicated)
 Theory and Practice pp 434-444
 D24: Henkel Tecnimetall (no day of publication indicated)
 D1, D10 and D15 were already taken into consideration in the granting procedure.
 D4 and D14 (partial) are to be considered in accordance with Art. 54 (3) EPC only as regards novelty.
 D21 to D24 have yet to be published.

II Grounds for the decision

II.1 Validity of the oppositions

The oppositions are valid because all requirements of Articles 99 (1), 100 and 105 as well as rules 1 (1) and 55 of the EPC are met.

II.2 Main request

II.2.1 Disclosure of the invention

The invention can be carried out by a person skilled in the art, since it must be presumed that he knows the prior art in accordance with D1 to D24. As a result comparable and/or identical methods and also foam systems are known, which are

suitable for producing a foam filling reinforcement of hollow profiles in accordance with the invention.

In accordance with Art. 83 and 100(b) EPC the invention is therefore disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

II.2.2 No inadmissible extension of the European Patent application

The features of Claim 1 in the version as originally filed are contained in Claim 1 in accordance with the main request. Additionally Claim 1 in accordance with the main request contains other features of Claim 9 in the version as originally filed. Thus Claim 1 in accordance with the main request is originally disclosed. In the original Claim 9 the method is already set forth. The change of category as a combination of the features of Claims 1 and 9 as originally filed is a clarification, since essential features of the original Claim 1 are also features of the method.

Opponent I concerning Para. 0011 in the patent description remarks that the subsequent addition "on the other hand a setting can be selected by varying the temperature and stoving time through the drying oven, during which first the corrosion protection medium dries and then the reaction of the foam is triggered" is not included in the original documents. In this connection it is remarked that this statement is valid. An extension of the patent in the original version however is not the case as a result of this addition, since it is not included in the claims and the setting of the stoving time and the temperature represents a necessity for the method to function. This necessary procedural method lies implicitly within the scope of the original disclosure, since in the end if the reverse order is the case, i.e. first foaming and then corrosion protection medium drying no useful product would result in any way.

All features of Claim 1 in accordance with the main request can be clearly inferred from the documents as originally filed, so that the rules of Art. 100 (c) and 123(2) are complied with.

II.2.3 Novelty

(D3) JP-A-117729 is the nearest equivalent to the invention. The passages in the text quoted below relate to the English translation of D3 submitted by the opponent and references in brackets refer to the symbols of the drawings in D3.

D3 describes:

- a) a method for the production of a hollow profile (5) with inner reinforcement (8a) for use with automobile bodies,
- b) whereby a rigid core material (8a) is coated with activatable material (9, 10)
- c) and an outer panel (5) is arranged so as to form a defined cavity (see Figs. 2 to 5),
- d) whereby the cavity is completely filled by the foaming action of the activatable material (9, 10) (also on P.11 Paras. 0035 and 0036 it is mentioned that the activatable coating can cover the entire outside surface of the core material, which would lead to complete filling of the profile!),
- e) the rigid core material (12) consists of non-foamed metallic material
- f) and the profile before the foaming action of the activatable material is conveyed to an anti-corrosion dip-tank (see Page 9, Para. 0027)
- g) and the corrosion protection medium reaches all areas of the inner profile (see Para. 0018).
- h) subsequently the hollow profile is conveyed to a drying oven and
- i) a reaction of the activatable material is triggered in the drying oven (see Para. 0021)
- j) and as a result the pre-defined cavity between the activatable material and the outer panel is filled with foam.

The method according to Claim 1 in accordance with the main request is therefore not new (Article 54(1) EPC).

II.2.4 Decision

Claim 1 in accordance with the main request cannot be granted, since the method according to Claim 1 is not new (Art. 100 (a) and/or 52 and 56 EPC)

II.3 Alternative request

II.3.1 Disclosure of the invention

The invention can be carried out by a person skilled in the art, since it must be presumed that he knows the prior art in accordance with D1 to D24. As a result, comparable and/or identical methods and also foam systems are known, which are suitable for producing a foam filling reinforcement of hollow profiles in accordance with the invention as well as in particular for arranging the spacers as they are drawn in Fig. 1 of the patent.

In accordance with Art. 83 and 100 (b) EPC the invention is therefore disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

II.3.2 No inadmissible extension

In contrast to Claim 1 in accordance with the main request, Claim 1 in accordance with the auxiliary request contains the following additional features:

k) that the size of the cavity (3) between the activatable material and the outer panel is pre-determined through spacers (5) arranged on the activatable material (2) and on the inside of the outer panel (4) depending on the particular application and

l) that the temperature for coating the rigid core material (1) provided with the activatable material (2) is maintained lower than the stoving temperature for the corrosion film in the drying oven.

Feature k is not contained in the description and the claims in the version of the application as originally filed.

In Fig. 1 of the version of the application as originally filed however it is clearly and unambiguously recognizable that spacers (5) are arranged and/or secured on the activatable material (2) and are also placed on the inside of the outer panel.

Feature l) is mentioned in Claim 10 of the version as originally filed.

All features of Claim 1 in accordance with the auxiliary request 2 can therefore be clearly inferred from the documents as originally filed, so that the patent in the granted version does not contain any inadmissible amendments in accordance with Art. 123 (2) and/or 100 (c) EPC.

II.3.3 Novelty

D3 describes:

a) a method for the production of a hollow profile (5) with inner reinforcement (8a) for use with automobile bodies,

b) in which a rigid core material (8a) is coated with activatable material (9, 10)

c) and an outer panel (5) is arranged so as to form a defined cavity (see Fig. 2 to 5),

d) whereby the cavity is completely filled by the foaming action of the activatable material (9, 10) (also on P.11 Paras. 0035 and 0036 it is mentioned that the activatable coating can cover the entire outside surface of the core material, which would lead to complete filling of the profile!),

- e) the rigid core material (12) consists of non-foamed metallic material
- f) and the profile before the foaming action of the activatable material is conveyed to an anti-corrosion dip-tank (see Page 9, Para. 0027)
- g) and the corrosion protection medium reaches all areas of the inner profile (see Para. 0018).
- h) subsequently the hollow profile is conveyed to a drying oven and
- i) a reaction of the activatable material is triggered in the drying oven (see Para. 0021)
- j) and as a result the pre-defined cavity between the activatable material and the outer panel is filled with foam.
- l) whereby the temperature for coating the rigid core material (1) provided with the activatable material (2) is kept lower than the stoving temperature for the corrosion film in the drying oven.

Feature l) is also implicitly known from D3, since it is to be assumed that the cans are not coated at ambient temperature. If the coating temperature was the same or higher than the stoving temperature, it could not be ruled out that the material would start foaming up already during the coating stage. Thus it must be assumed that the coating temperature in D3 is lower than the stoving temperature.

The method in Claim 1 in accordance with the auxiliary request differs from D3 in that the size of the cavity between the activatable material and the outer panel is pre-determined through spacers arranged on the activatable material and on the inside of the outer panel depending on the particular application.

The method in Claim 1 in accordance with the auxiliary request is therefore new (Article 54 (1) EPC).

II.3.4 Lack of inventive step

This feature achieves the material objective that the size and position of the cavity to be filled with foam is pre-determined by suitable steps.

It is obvious to the person skilled in the art that the core material with the activatable coating must be at a defined distance from the outer panel, otherwise the position of the hollow profile would not be secure. For the person skilled in the art it is therefore normal procedure to secure the position of the hollow profile before the foaming process.

In the prior art he also finds in (D8) JP-A-7-31589 disclosing an identical method the solution by using spacers 2B arranged on the activatable material - see Fig.1 in D8. The spacers are also arranged on the outer panel.

In all other respects D8 in conjunction with (D7) US-A-5160465, the content of which is the same as the patent specification detailed in D8, JP-A 02-276836, shows all important features in Claim 1 of the auxiliary request. This was again clearly explained by the representative of opponent II, Dr. Scheffler, at the oral proceedings.

Inclusion of this feature in the method described in D3 is therefore considered as a usual and not inventive step for solving the objective described.

The method in accordance with Claim 1 of the auxiliary request therefore meets the requirements of Article 52 (1) EPC, because the method of Claim 1 in accordance with the auxiliary request does not involve an inventive step within the meaning of Art. 56 EPC.

III. Decision

European Patent 1 064 188 is revoked in accordance with Article 102 (1) EPC.

IV. Additional remarks

Claim 1 in accordance with the main request and the auxiliary request again contains the alternative features that the rigid core material consists of a foamed metallic material and/or a synthetic material reinforced with metal fibres, carbon fibres or glass fibres. These features are not mentioned in D3.

These alternatives are only discussed in the written proceedings.

The Opposition Division states its opinion in this connection with a view to completeness.

In (D1) WO-A-93/0513, P.1, lines 34 to 40 reference is made to the use of such reinforcing materials for foam filling vehicle frame hollow bodies, so that these alternative features do not appear inventive. Also more precise material data are lacking in the patent specification. In addition these alternative features were not highlighted in the description as being essential to the invention. Here, for the person skilled in the art, normal materials for foam-filling reinforcement of vehicle frame hollow profiles, the use of which does not involve an inventive step, are concerned.

IN THE HIGH COURT OF JUSTICE

HC04C00915

CHANCERY DIVISION

PATENTS COURT

MR JUSTICE PATTEN

THURSDAY THE 19th DAY OF AUGUST 2004

BETWEEN

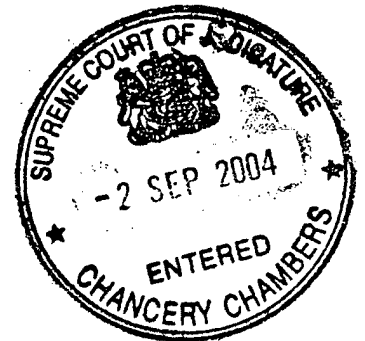
CORE PRODUCTS S.A.S

Claimant

and

MOLLER PLAST GMBH

Defendant



UPON THE WRITTEN APPLICATION of the Claimant

AND THE CLAIMANT and the Defendant by their respective Solicitors having consented in writing to there being Judgment for the Claimant against the Defendant and to the terms of this Order

IT IS ORDERED

1. That European Patent (UK) Number EP 1 064 188 B1 in the name of the Defendant be revoked
2. That the Defendant do pay the Claimant's costs on the standard basis such costs to be assessed if not agreed by 17th September 2004 and paid within fourteen days of agreement or assessment



[Translation from the German language]

FEDERAL PATENT COURT

IN THE NAME OF THE PEOPLE

JUDGEMENT

3 Ni 33/03

(Matter reference)

Pronounced on
15 June 2004
Obermaier
Justice officer
as clerk
of the court

In the patent nullity matter

of Core Products S.A.S., rue Ampere, F-67120 Duttlenheim (France), legally represented by its
president Dominique Gimbert,

Plaintiff,

Legal representatives: Lovells, law firm
Kennedydamm 17, 40476 Düsseldorf

versus

MöllerTech GmbH, Kupferhammer, 33649 Bielefeld, legally represented by its managing
director, Dr.- Ing. Leopold Schmidt,

Defendant,

[Translation from the German language]

Legal representatives: BOEHMERT & BOEHMERT, law firm, Detmolder Strasse 235, 33605 Bielefeld,

concerning Patent 198 12 288

the 3rd senate (Nullity Senate) of the Federal Patent Court, after the oral hearing of 15 June 2004, with the collaboration of the presiding judge Dipl.-Ing. Hellebrand as well as the judges Dipl.-Ing. Köhn, Dipl.-Ing. Dr. Pösentrup, Brandt and Dipl.-Ing. Frühauf

found as follows:

The Patent 198 12 288 is declared invalid.

The Defendant shall bear the costs of the legal dispute.

The judgement is preliminarily enforceable against provision of security in the amount of 120% of the amount to be enforced.

Facts

The Defendant is the registered owner of Patent 198 12 288 (Patent in Suit) which was applied for on 20 March 1998 and which covers a "hollow profile with internal reinforcement and a method of manufacturing such hollow profile"; the version granted includes seven patent claims.

The granted patent claims 1 to 5 are as follows:

[Translation from the German language]

- "1. Hollow profile member with internal reinforcement, particularly for use in automobile bodywork, in which a core material (1) is coated with an activatable material (2) and an outer metal sheet (4) is arranged with formation of a cavity (3), wherein the cavity is of a volume such that it is completely filled by the foaming process of the activatable material, and the firm core material (1) is formed from a foamed or unfoamed metal material or from a synthetic material reinforced with metal fibres, carbon fibres or glass fibres.
5. Method of manufacturing a hollow profile member with internal reinforcement, particularly for use in automobile bodywork according to one of claims 1 to 4, characterised in that the hollow profile member, prior to the foaming process of the activatable material (2), is fed into an anti-corrosion immersion bath whereby the anti-corrosion agent passes into all regions of the inner profile member, and subsequently the hollow profile member is fed into a drying oven."

By pleading dated 26 January 2004 the Defendant submitted new patent claims 1 to 4 by means of which it defends the Patent in Suit. Patent claim 1 in the defended version is as follows:

- "1. Method of manufacturing a hollow profile with reinforcement of the inner wall, notably for use in automobile body work, wherein
- a) a firm core material (1) is coated with an activatable material (2);
 - b) the firm core material (1) is formed from a foamed or unfoamed metal material or from a synthetic material reinforced with metal fibres, carbon fibres or glass fibres;
 - c) an outer sheet-metal piece (4) is arranged, forming a cavity (3)
 - d) the size of the cavity (3) is of a volume such that it can be completely filled out

- by the foaming process of the activatable material (2);
- e) the hollow profile, prior to the foaming process of the activatable material (2), is introduced to an anti-corrosion immersion bath, with the anti-corrosion agent reaching all areas of the inner profile;
 - f) the hollow profile is subsequently introduced to a drying oven and as a result of the higher temperature a reaction of the activatable material (2) is triggered and, with the foam forming as a result, the cavity (3) originally specifically formed is filled out between the activatable material (2) and the outer sheet-metal piece (4) and
 - g) the temperature for the coating of the core material (1) provided with the activatable material (2) is kept lower than the baking temperature for the corrosion protection layer in the drying oven."

With regard to the wording of the patent claims 2 to 4 indirectly or directly referring back to this patent claim 1, reference is made to the claim version submitted by the Defendant in its pleading of 26 January 2004.

The Plaintiff asserts that the object of the Patent in Suit is not patentable since it is not new and not based on any inventive activity. Alternatively, namely in the event that the qualifications of the competent person skilled in the art are assumed to be very low, it claims that the Patent in Suit does not disclose the invention clearly and completely enough for a person skilled in the art to execute it. With regard to the state of the art it refers to the following documents:

LNK2	DE 42 27 393 A1,
LNK3	DE 196 35,734 A1,
LNK5	Braess/Seifert, <i>Handbuch Kraftfahrzeugtechnik</i> , p. 351-353,
LNK6	Set of exhibits: excerpts from specialist articles and patent publications
LNK9	US-PS 5 194 199,
LNK10, 10b	WO 99/39882 partially translated into German

[Translation from the German language]

LNK11, 11a, 11b	JP 7-117728 A with a translation into English and German,
LNK12, 12b	WO 93/05103 partially translated into German
LNK13, 13a, 13b	JP 7-31569 U translated into English and partially into German,
LNK14, 14a	JP 58-87668 with a translation into English
LNK15, 15b	US-PS 5 160 465 partially translated into German
LNK15c	translation of EP O 383 498 corresponding to LNK15,
LNK16	WO 97/43501,
LNK17	excerpt from RÖMPP, <i>Lexikon der Chemie</i> , 10 th edition, p. 1186, entry on "epoxy resins" [<i>Epoxidharze</i>]

The Plaintiff moves

for the German Patent 198 12 288 to be nullified in its entirety.

The Defendant

defends the Patent in Suit with patent claims 1 to 4 in the version submitted with the pleading of 26 January 2004, and moves for dismissal of the complaint in this respect.

The Defendant opposes the submission of the Plaintiff and deems the Patent Suit to be patentable in the granted version. To support its submission it submitted

VDI [*Verein Deutscher Ingenieure* - Association of German Engineers] report 1543, p. 227-248
Römpf Chemie Lexikon, 9th edition, entry "coat(ing)" [*Beschichtung*].

Reasons for Decision

The admissible complaint proves founded.

The reason for nullity asserted leads to the nullity of the Patent in Suit (Sec. 22 para.1, Sec. 21 para. 1 no. 1 of the German Patent Act [*Patentgesetz – PatG*]).

The Patent in Suit is to be readily nullified to the extent it is not defended, i.e. to the extent it exceeds the object of the patent claims of 26 January 2004.

I

1. The Patent in Suit concerns a hollow profile with internal reinforcement, in particular for use in automobile bodywork.

According to the statements in the Patent in Suit, in mechanical engineering and in particular in the area of automobile construction punched and preformed metal profiles are welded together in twin-shell design. For the hollow profiles formed as a result sufficient resistance moments and bending strengths can only be achieved if the sheet-metal profiles are enlarged or the sheet-metal wall strength is increased. An enlargement of the profiles results in a modification of the inner and outer dimensions notably in the case of motor vehicles, and an increase in the wall strength results in an undesired increase in weight. To confer stiffness to hollow profiles it is also possible to reinforce these with ribbed profiles. However, with respect to hollow profiles which are to be treated with corrosion protection on the inside the Patent Specification considers such rib profiles to be unsuitable if the protective layer, as is customary for automotive vehicle bodies, is to be produced in the immersion bath process, since the rib profiles prevent the anti-corrosion agent from passing into all regions of the inner profile (Patent Specification in Suit, column 1, lines 6 to 24).

With respect to DE 42 27 393 A1 the Patent Specification in Suit states that there a lowering of the susceptibility of the metal of the hollow body to corrosion in the area of the space enclosed by such hollow body is to be achieved. To this end *inter alia* an electrically conducting layer consisting of a sacrificial metal or a foil is inserted, which layer is contacted with the inner

surface of the hollow body by means of a foaming process of a material wrapping the core. It cannot be inferred from this document how a suitable internal reinforcement to absorb forces can be achieved in the case of hollow profiles (Patent Specification in Suit, column 1, lines 25 to 35).

The foaming of hollow parts to improve the mechanical resistance to deformation is said to be known from DE 196 35734 A1. These are mostly seamless or welded tubes that can be deformed if required. Particular measures to reduce the susceptibility to corrosion were not mentioned (Patent in Suit, column 1, lines 36-42).

2. Against this background the objective according to the teaching of the Patent in Suit is to form a hollow profile in such a way that an anti-corrosion agent can pass into all regions of the inner profile and that a high stiffness can be obtained without substantially increasing weight and cross-sections (Patent Specification in Suit, column 1, lines 43 to 47).

3. As a solution to this problem, patent claim 1 in the defended version proposes a method with the above features a to g.

II

1. In the Patent in Suit the invention is described clearly and completely enough for a person skilled in the art to execute it.

In this connection, "person skilled in the art" refers to a certified engineer [*Diplomingenieur*] with a degree in mechanical engineering and with experience in the construction of parts for automotive vehicle bodies, using compound materials of metal and plastic who, if necessary, consults a chemist with experience in the area of foamable synthetic material.

Recently, the Plaintiff has no longer been denying the reproducibility of the teaching according to the Patent in Suit either.

2. The object of the Patent in Suit in the defended version does not represent a patentable invention within the meaning of Secs. 1 to 5 *PatG*, since it is in any case not based on any inventive activity.

Patent claim 1 of 26 January 2004 includes the features from the patent claim 1 as granted (rephrasing them to process features) and 5 to 7. This summary of features results in a permissible restriction of the object of the claim compared with the object of the Patent in the granted version.

From JP 7-117728 A (LNK11) to whose figures and translation into German (LNK11b) reference is made hereinafter, a method of manufacturing hollow profiles with internal reinforcement for automotive vehicle bodies is known according to which thermosetting foaming sheets are initially made to adhere to a reinforcing core material, namely a reinforcing core material formed from, for instance, a tubular member made of sheet metal (para. [0035]), or a plate (para. [0037]).

Since the thermosetting synthetic material is self-adhesive ([para. 0018]), such sticking is ultimately equivalent to coating. Thus feature a) and an alternative to feature b) of the defended patent claim 1 exist for the known method.

According to the citation the coated reinforcing core is arranged in a hollow profile the cavity of which it initially does not fill out completely (fig. 5b and 10). The cavity, the coated reinforcing core and the quantity of the thermosetting synthetic material are co-ordinated such that the cavity cross-section can be entirely filled out by the foaming process (fig. 6b and 10). Thus also features c) and d) of the defended patent claim 1 are fulfilled by the known method.

The citation furthermore describes that the hollow profile with the inserted coated reinforcing core is introduced to a paint immersion bath ([0015]), with the paint reaching the inner space of

the hollow profile. This is also indicated by the statements at the end of paragraph [0018], since measures for preventing the paint from penetrating the hollow reinforcing core are necessary only if the paint reaches the inner space of the hollow profile and thus the reinforcing core. The citation does not give any indication of whether the paint is an anti-corrosion agent. However, any painting is corrosion protection, in some cases an additional one. Also the fact that the hollow profile, or the automotive vehicle body of which the hollow profile is a component, is immersed in the coating bath to make the coating liquid penetrate all cavities, indicates that the coating liquid is to also serve as an anti-corrosion agent. Mere painting of cavities which are not freely visible does not make any sense. Moreover, WO 93/05103 (LNK12) teaches the reader to trigger the foaming of a thermosetting synthetic material for foaming a hollow profile at the very beginning of the painting process, preferably prior to applying a primer and a top coat, i.e. in a drying oven after the anti-corrosion bath (p. 2 lines 8 to 13 in conjunction with p. 7 lines 25 to 30).

If during assembly the coated reinforcing core is bonded to the inside wall of the hollow profile (paragraph [0010]), figure 5b), the coating liquid cannot reach the bonding spot. In the example of an embodiment pursuant to figure 10 (right-hand side) the coated reinforcing core is obviously not bonded to the inside of the hollow profile. The person skilled in the art will assume that it is held in the described position by spacers. It may be left as a matter of debate whether the person skilled in the art automatically assumes that the spacers cover only negligibly small spots on the inner surface of the hollow profile, such that the coating liquid reaches all areas of the inner profile during the immersion bath. In any case, it does not require any inventive activity to execute the spacers accordingly since, as already stated, the purpose of the immersion bath is to complete coat of all surfaces of the automotive vehicle body.

The person skilled in the art can deduce feature e) of the defended patent claim 1 on the basis of JP 7-117728 A (LNK11) in connection with considerations typical of the profession and in any case taking into consideration also WO 93/05103 (LNK 12).

After immersion painting, the automotive vehicle body is introduced to a drying and/or baking

[Translation from the German language]

oven in which the foaming of the plastic coating of the reinforcing core is triggered by the higher temperature in the oven, and the foam forming fills out the cavity cross-section (paragraph [0009] in conjunction with paragraph [0010] and claim 2). Thus, also feature f) of the defended patent claim 1 is part of the known method.

Feature g) of the defended patent claim 1 does not contain any additional information. It is already borne out by features a), c) and f) that the activatable material with which the firm core material is coated foams only at such higher temperature in the drying oven. Logically, this implies that the temperatures in all preceding steps of the process are below the activation temperature (foaming temperature).

Even if the method stated in the defended claim 1 is new compared with the method known from JP 7-117728 A, as already stated, it readily suggests itself to the person skilled in the art from the latter method.

The VDI report submitted by the Defendant shows that Opel developed a structured foam reinforcement for side parts of the roof frame of its vehicles. According to the Defendant, Opel worked on this *inter alia* with Henkel Corporation, USA. The result of these efforts is the object of WO 99/39882 (citation LNK 10). From the fact that, prior to application of the Patent in Suit, four of the leading companies (Opel, Henkel and further development partners did not think of the specific teaching regarding the technical activity pursuant to the Patent in Suit, the Defendant infers the existence of a sufficiently inventive activity of the teaching pursuant to the Patent in Suit (cf. pleading of 26 January 2004 from the middle of p.17). The Senate did not endorse this opinion. It may be left as a matter for debate whether applying paint after immersion in an anti-corrosion immersion bath and prior to feeding of the hollow profile to a drying oven, paint is applied (op. cit. p. 7 paras. 4 and 5, p. 8 paras. 1 and 3) is actually a significant difference or merely an equivalent method. The fact that a team of qualified developers arrived at a certain result in no case justifies the conclusion that another solution to the same problem which is somewhat different is based on inventive activity. Whether or not any inventive activity exists is to be assessed with respect to the state of the art at the time of

[Translation from the German language]

the invention, and not in comparison with the result of other developers.

It was neither submitted to the Senate nor was it evident to the Senate that any of the subclaims had an independent significance.

The patent claims 1 to 4 are thus not legally valid.

III

The decision on costs is based on Sec. 84 Para. 2 *PatG* in conjunction with Sec. 91 Para. 1 Sentence 1 of the German Code of Civil Procedure [*Zivilprozessordnung – ZPO*], the decision on preliminary enforceability is based on Secs. 99 Para. 1 *PatG* in conjunction with Sec. 709 sentence 1 and 2 *ZPO*.

Hellebrand

Köhn

Dr. Pösentrup

Brandt

Frühauf

Be

Translation from the German language

German Patent and Trademark Office

Munich, 19 May 2003
Tel.: (0 89) 21 95 -

File ref.: 198 56 255.1-24

Applicant/Holder:

German Patent and Trademark Office 80297 Munich

Your ref.:

Please state file re. and Applicant/Holder
for all submissions and payments!

Decision

Patent division 24 decided as follows in the meeting on 19 May 2003:

The Patent of Addition 198 56 255 of

MöllerTech GmbH
33649 Bielefeld, DE

with the designation

hollow profile with internal reinforcement

is revoked following examination of the Opposition in accordance with Sec. 61 sentence 1 of the German Patent Act [*Patentgesetz*].

Reasons:

I.

An Opposition has been filed against Patent of Addition 198 56 255 by the company Henkel KGaA, 40191 Düsseldorf.

The Opponent is of the opinion that the subject matter of Claim 1 of the Patent in Suit is not novel in comparison to the state of the art, or at least is not based on inventive activity.

To substantiate this, it refers i.a. to the citation

D2: US5194199A.

The Opponent is also of the opinion that the invention is not disclosed clearly and completely enough for a skilled man to be able to execute it.

The Opponent applies for the Patent of Addition to be revoked in its entirety.

In addition, it applies as an alternative for another hearing to be scheduled.

The Patent Holder applies for the Opposition to be rejected and the Patent of Addition to be maintained in the version granted. It contradicts the submissions of the Opponent and is of the opinion that none of the citations specified by the Opponent anticipate the novelty or suggest the subject matter of Claim 1 of the Patent in Suit. With its submission of 7 July 2000, received on 17 July 2000, the Patent Holder submitted a new Claim 1 and applied as an alternative for the Patent of Addition to be maintained with this Claim.

Patent Claim 1 pursuant to the main request reads as follows:

"hollow profile member with an internal reinforcement, particularly for use in automobile bodywork, in which a core material is coated with an activatable material and an outer metal sheet is arranged with formation of a defined cavity, wherein the cavity is of a volume such that it is completely filled by the foaming process of the activatable material, in accordance with Patent 198 12 288 Cl, characterised in that the core material and the outer material serving for the coating are formed from a reinforcing and/or energy-absorbing foam system and/or an acoustic foam."

Patent Claim 1 pursuant to the auxiliary request reads as follows:

"hollow profile member with an internal reinforcement, particularly for use in automobile bodywork, in which a core material is coated with an activatable material and an outer metal sheet is arranged with formation of a defined cavity, wherein the cavity is of a volume such that it is completely filled by the foaming process of the activatable material, wherein the hollow profile member can be fed into a corrosion dipping bath before the foaming process and the foaming process can then be introduced into a drying oven, in accordance with Patent 198 12 288 Cl, characterised in that the core material and the outer material serving for the coating are formed from at least two different foam components of a reinforcing foam system, an energy-absorbing foam system and an acoustic foam."

With regard to the wording of Patent Claims 2 to 4 and the other details, reference is made to the content of the files.

II.

The Opposition is admissible and is moreover successful as to its subject matter.

A. Main request

The granted Claims 1 to 4 are in keeping with the original Claims. Thus, there are no reservations with regard to sufficient disclosure of their subject matter.

The valid Patent Claim 1 communicates to the skilled man, a mechanical engineer from a post-secondary technical institution with specialist knowledge in the field of plastics technology, a sufficiently specific teaching for technical execution. The contradiction alleged by the Opponent between Patent Claim 1 of the Patent of Addition and the disclosure content of the principal patent cannot be seen. Rather, the skilled man recognises without any problem that the Patent of Addition does not relate to all embodiments of the hollow profile members claimed in the principal patent, but only to hollow profile members with a core made of foamed material.

The Patent of Addition is based according to the information provided in the patent specification (cf. column 1 lines 11 to 16) analogously on the task of making it more effective in comparison with the hollow profile member disclosed in the principal patent. In this respect, the Patent of Addition suggests that the core and coating material should consist of a reinforcing and/or energy-absorbing foam system and/or acoustic foam.

It may be left as a matter of debate whether the claimed product can still be described as novel; the teaching of Patent Claim 1 is not in fact based on inventive activity.

The citation D2, cf. especially the abstract and description in column 2, lines 17 to 21, discloses a structural component for automotive construction consisting of a hollow profile member 3, which is formed from outer metal sheets 4,5 and inside contains light-density material core made of hard foam. The light-density material core is coated with an activatable, foamable material 1. Between the core and the outer metal sheet there is first of all a cavity, the volume of which is such that it is completely filled by the foaming process of the activatable material, see Fig. 2. The citation D2, cf. in particular the description in column 2, lines 1 to 9 as well as 51 to 56, also states that the hollow supports with foam core are designed to increase the bending rigidity and absorb the kinetic energy if a collision occurs.

If in the knowledge of this teaching the skilled man has to choose whether to use as a core material foam with a reinforcing or energy-absorbing effect, or foams without these qualities, he will opt for the first on the basis of the data in D2. No inventive activity can be seen here, since the correct choice is to be attributed to the knowledge and skill of the skilled man.

For the reasons stated, the subject matter of Patent Claim 1 in accordance with the principal application is not based on inventive activity, which means that this claim is not tenable.

Along with principal Claim, sub-claims 2 to 4, which have no recognisable independent significance, also fail.

B. Auxiliary request

Claim 1 of the auxiliary request differs from that of the main request in that the process features have been included pursuant to which the hollow profile member can be fed into a corrosion dipping bath before the foaming process and the foaming process can be introduced into a drying oven on one hand, and the claimed hollow profile member is restricted such that the core and the coating are made of at least two different materials on the other.

(In lieu of "corrosion dipping bath" ["*Korrosions-Tauchbad*"], the correct term in line with the original application is "anti-corrosion dipping bath" ["*Korrosionsschutz-Tauchbad*"])

The process features are stipulated in Claim 5 of the principal patent DE 198 12 288. The reference to features of the original application is also unobjectionable (cf. decision of the Federal Patents Court [*BPatGE*] 23, 12). The product feature of the different foam materials is one of the alternatives stipulated in the granted Claim 1.

The Patent Claim 1 pursuant to the auxiliary request is thus admissible.

The subject matter of Claim 1 is novel, however it is not based on inventive activity.

The process features included in Claim 1 are not to be taken into account in the assessment of inventive activity since Claim 1 offers protection for one thing and one thing alone is characterised by its objective features.

Moreover, the new process features included in the preamble merely state, in view of the optional statement "can be fed into" and "can be introduced into", that the possibility exists of implementing the process steps referred to. It might then be possible to determine an anti-corrosion coating on the finished product resulting from the preparatory treatment, which however precisely in the field of automotive construction is attributable to the customary anti-corrosion measures which are common knowledge to the skilled man for steel sheets. It would therefore not be able to establish an inventive step.

The process measures for the foaming procedure can no longer be determined beyond a doubt on the finished product and are therefore unsuitable to characterise the subject matter as inventive.

Thus, the features of the preamble of Claim 1 pursuant to the auxiliary request can therefore play no role in establishing inventive activity.

The characteristic that the core material and the outer material serving for the coating are formed from at least two different foam components of a reinforcing foam system, an energy-absorbing foam system and an acoustic foam is suggested to the skilled man by D2. Thus, the hollow profile member of the core known from D2, cf. description, column 2, lines 18/19 and 40, is made for example of aluminium foam and the coating i.a. of polyurethane, i.e. two different foam materials. The skilled man knows that the aluminium foam is a hard foam, which therefore reinforces the hollow profile member. He also knows that many types of foam, including urethane foams, are noise-abating. Finally foams have an energy-absorbing effect in and of themselves when deformed against their resistance.

Thus, the qualities of the foam stipulated in Claim 1 cannot be the result of inventive activity.

For the reasons stated, Patent Claim 1 pursuant to the auxiliary request is not tenable either.

The scheduling of an oral hearing as applied for by the Opponent as an alternative was not necessary since a decision was to be made as applied for by the Opponent. Nor were there any unclarified points under patent law or unclarified technical points which would have required oral discussion (cf. Federal Patent Act [BPatG] in *Blatt für Patent-, Muster- und Zeichenwesen* (Bulletin for Patents, Utility Models and Marks), 1984, 241-244).

Reference is made to the instructions on the right of Appeal contained in the cover letter.

Dr. Waeber

Patent division 24
Marckwardt

Dr. Hajduk

Executed
(signature)
government employee